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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/160,583 09/25/98 KAMO

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022850 IM62/0405  
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EXAMINER

CREPEAU, J

ART UNIT

PAPER NUMBER

1745

DATE MAILED:

04/05/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/160,583

Applicant(s)

Kamo

Examiner

Jonathan Crepeau

Group Art Unit

1745

☒ Responsive to communication(s) filed on Mar 1, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) 6-18 and 20 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-5 and 19 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Election/Restriction*

1. Applicant's election with traverse of Group I and species A<sub>a</sub>S (claims 1-5 and 19) in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the Office has not provided sufficient reasons as to why batteries and capacitors using the same material are unrelated inventions, and also that the Office has not provided a reason to support a conclusion of patentable distinctness between the species. This is not found persuasive because firstly, regarding the species, the burden is on Applicants to come forth with evidence supporting a conclusion of obviousness or non-distinctness between the species. The Examiner's statement that the species would be patentable over each other is sufficient reason to sustain an Election of Species requirement. Furthermore, regarding the restriction requirement, it is deemed proper due to the separate status in the art that batteries and capacitors have acquired, as evidenced by their different classification and by their different and functions and effects. While both are "energy storage devices", batteries and capacitors are designed to perform *significantly* different functions in electrical applications. For example, capacitors are not suited for applications which require a constant potential, and the different current-voltage characteristics of the two devices are widely recognized.

The requirement is still deemed proper and is therefore made FINAL.

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***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 recites the compounds " $3\text{Ag}_2\text{S}\cdot\text{Ag}_2\text{S}_3$ " and " $\text{AuS}_2$ ". Both of these compounds appear to fail to further limit the parent compound, " $\text{A}_a\text{S}$ ". Thus, the recitation of the compounds is not clear, and requires correction.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Plichta et al (U.S. Pat. 5,154,990). The reference teaches a nonaqueous secondary battery comprising a negative electrode material of CuS in column 3, lines 8-11. Thus, the instant claims are anticipated.

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6. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 284104. The reference teaches a nonaqueous secondary battery comprising a negative electrode material of  $\text{Cu}_2\text{S}$  or  $\text{Ag}_2\text{S}$  on page 4, line 3. Thus, the instant claims are anticipated.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al (U.S. Pat. 5,998,063).

The reference teaches a nonaqueous secondary battery comprising a positive electrode material which may include gold sulfide in column 10, lines 50-58. The reference further teaches that the negative electrode actually comprises some cathode active material in column 4, lines 18-27.

The reference does not explicitly teach that the gold sulfide is represented by  $\text{AuS}$  or  $\text{AuS}_2$ .

However, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the artisan may reasonably expect the gold sulfide to be represented by one of the above formulas. Since no criticality or unexpected results have

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been shown for the stoichiometric amounts of each element in the compound, the general disclosure of a gold sulfide is sufficient to render the instant claims obvious.

*Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (703) 305-0051. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maria Nuzzolillo, can be reached at (703) 305-3776 from Monday-Thursday. The phone number for the organization where this application or proceeding is assigned is (703) 305-5900.

Documents may be faxed to (703) 306-3429. The official fax number for documents of extreme importance is (703) 305-3599 (it will take longer to receive documents faxed to this number; therefore the first number is preferred).

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

JSC

April 3, 2000

Maria Nuzzolillo  
Supervisory Patent Examiner  
Technology Center 1700

